

Index to Volume 155

Alphabetical Table of Contents of Authors

Aars, Jon, and Rolf A. Ims. Population Dynamic and Genetic Consequences of Spatial Density-Dependent Dispersal in Patchy Populations, 252

Alaja, Susanna. See *Ranta, Esa*, 294

Andries, John M., and Beatrix E. Beisner. Fluctuating Environments and Phytoplankton Community Structure: A Stochastic Model, 556

Arellano, Elizabeth. See *Sullivan, Jack*, 755

Barraclough, Timothy G., and Alfred P. Vogler. Detecting the Geographical Pattern of Speciation from Species-Level Phylogenies, 419

Barta, Zoltán, and Luc-Alain Giraldeau. Daily Patterns of Optimal Producer and Scrounger Use under Predation Hazard: A State-Dependent Dynamic Game Analysis, 570

Bascompte, Jordi. See *Kendall, Bruce E.*, 628

Beckerman, Andrew P. See *Schmitz, Oswald J.*, 141

Beisner, Beatrix E. See *Andries, John M.*, 556

Bell, Graham. The Distribution of Abundance in Neutral Communities, 606

Bishop, John G. See *Fagan, William F.*, 238

Bjørnstad, Ottar N. See *Kendall, Bruce E.*, 628

Brommer, Jon, Hanna Kokko, and Hannu Pietiäinen. Reproductive Effort and Reproductive Values in Periodic Environments, 454

Brown, Martin J. See *Parker, Geoffrey G.*, 473

Cant, Michael A., and Rufus A. Johnstone. Power Struggles, Dominance Testing, and Reproductive Skew, 406

Case, Ted J., and Mark L. Taper. Interspecific Competition, Environmental Gradients, Gene Flow, and the Coevolution of Species' Borders, 583

Claessen, David, André M. de Roos, and Lennart Persson. Dwarfs and Giants: Cannibalism and Competition in Size-Structured Populations, 219

Clauss, M. J., and D. L. Venable. Seed Germination in Desert Annuals: An Empirical Test of Adaptive Bet Hedging, 168

Collins, Scott L. Disturbance Frequency and Community Stability in Native Tallgrass Prairie, 311

Day, Troy. Competition and the Effect of Spatial Resource Heterogeneity on Evolutionary Diversification, 790

de Mazancourt, Claire, and Michel Loreau. Effect of Herbivory and Plant Species Replacement on Primary Production, 735

de Roos, André M. See *Claessen, David*, 219

Diehl, Sebastian, and Margit Feifel. Effects of Enrichment on Three-Level Food Chains with Omnivory, 200

Diserud, Ola H., and Steinar Engen. A General and Dynamic Species Abundance Model, Embracing the Lognormal and the Gamma Models, 497

Donoghue, Michael J. See *Weihen, George D.*, 46

Emery, Stacie N. See *McCauley, David E.*, 814

Engen, Steinar. See *Diserud, Ola H.*, 497

Ernsting, Ger, and Anneke Isaaks. Ectotherms, Temperature, and Trade-offs: Size and Number of Eggs in a Carabid Beetle, 804

Fagan, William F., and John G. Bishop. Trophic Interactions during Primary Succession: Herbivores Slow a Plant Invasion at Mount St. Helens, 238

Fagan, William F. See *Kendall, Bruce E.*, 628

Farmer, C. G. Parental Care: The Key to Understanding Endothermy and Other Convergent Features in Birds and Mammals, 326

Feifel, Margit. See *Diehl, Sebastian*, 200

Forbes, Mark R. See *Leung, Brian*, 101

Fox, Laurel R. See *Schreiber, Sebastian J.*, 637

Gaines, Steven D. See *Gaylord, Brian*, 769

Garland, Theodore, Jr., and Anthony R. Ives. Using the Past to Predict the Present: Confidence Intervals for Regression Equations in Phylogenetic Comparative Methods, 346

Gaylord, Brian, and Steven D. Gaines. Temperature or Transport? Range Limits in Marine Species Mediated Solely by Flow, 769

Getz, Wayne M. See *Schreiber, Sebastian J.*, 637

Giraldeau, Luc-Alain. See *Barta, Zoltán*, 570

Gómez, José M., and Regino Zamora. Spatial Variation in the Selective Scenarios of *Hormathophylla spinosa* (Cruciferae), 657

Grant, Peter R. What Does It Mean to Be a Naturalist at the End of the Twentieth Century? 1

Gurevitch, Jessica, Janet A. Morrison, and Larry V. Hedges. The Interaction between Competition and Predation: A Meta-analysis of Field Experiments, 435

Hambäck, Peter A. See *Schmitz, Oswald J.*, 141

Hamilton, Ian M. Recruiters and Joiners: Using Optimal Skew Theory to Predict Group Size and the Division of Resources within Groups of Social Foragers, 684

Hedges, Larry V. See *Gurevitch, Jessica*, 435

Houle, David. See *Leung, Brian*, 101

Hughes, Jennifer B., and Joan Roughgarden. Species Diversity and Biomass Stability, 618

Ims, Rolf A. See *Aars, Jon*, 252

Isaaks, Anneke. See *Ernsting, Ger*, 804

Ives, Anthony R. See *Garland, Theodore, Jr.*, 346

Jarne, Philippe. See *Kirkpatrick, Mark*, 154

Johnson, Mark. A Reevaluation of Density-Dependent Population Cycles in Open Systems, 36

Johnstone, Rufus A. See *Cant, Michael A.*, 406

Jumars, Peter A. Animal Guts as Ideal Chemical Reactors: Maximizing Absorption Rates, 527

Jumars, Peter A. Animal Guts as Nonideal Chemical Reactors: Partial Mixing and Axial Variation in Absorption Kinetics, 544

Kaitala, Veijo. See *Ranta, Esa*, 294

Kaspari, Michael, Sean O'Donnell, and James R. Kercher. Energy, Density, and Constraints to Species Richness: Ant

Assemblages along a Productivity Gradient, 280

Keitt, Timothy H. See Kendall, Bruce E., 628

Kendall, Bruce E., Ottar N. Björnstad, Jordi Bascompte, Timothy H. Keitt, and William F. Fagan. Dispersal, Environmental Correlation, and Spatial Synchrony in Population Dynamics, 628

Kercher, James R. See Kaspari, Michael, 280

Kirkpatrick, Mark, and Philippe Jarne. The Effects of a Bottleneck on Inbreeding Depression and the Genetic Load, 154

Knops, Johannes M. H. See Koenig, Walter D., 59

Koenig, Walter D., and Johannes M. H. Knops. Patterns of Annual Seed Production by Northern Hemisphere Trees: A Global Perspective, 59

Kokko, Hanna. See Brommer, Jon, 454

Lenormand, Thomas, and Michel Raymond. Analysis of Clines with Variable Selection and Variable Migration, 70

Lenski, Richard E. See Rozen, Daniel E., 24

Leung, Brian, Mark R. Forbes, and David Houle. Fluctuating Asymmetry as a Bioindicator of Stress: Comparing Efficacy of Analyses Involving Multiple Traits, 101

Loreau, Michel. See de Mazancourt, Claire, 735

Luttbeg, Barney, and Oswald J. Schmitz. Predator and Prey Models with Flexible Individual Behavior and Imperfect Information, 669

Mazalov, Vladimir. See Perrin, Nicolas, 116

McCauley, David E., Matthew S. Olson, Stacie N. Emery, and Douglas R. Taylor. Population Structure Influences Sex Ratio Evolution in a Gynodioecious Plant, 814

Menu, Frédéric, Jean-Philippe Roebuck, and Muriel Viala. Bet-Hedging Diapause Strategies in Stochastic Environments, 724

Merilä, J., and B. C. Sheldon. Lifetime Reproductive Success and Heritability in Nature, 301

Morrison, Janet A. See Gurevitch, Jessica, 435

Nisbet, Roger M. See Richards, Shane A., 266

O'Donnell, Sean. See Kaspari, Michael, 280

Oksanen, Lauri, and Tarja Oksanen. The Logic and Realism of the Hypothesis of Exploitation Ecosystems, 703

Oksanen, Tarja. See Oksanen, Lauri, 703

Olivieri, Isabelle. See Ronce, Ophélie, 485

Olson, Matthew S. See McCauley, David E., 814

Oyama, Ryan K. See Weiblen, George D., 46

Page, Robert E., Jr. See Tarpay, David R., 820

Parker, Geoffrey G., and Martin J. Brown. Forest Canopy Stratification—Is It Useful? 473

Pen, Ido, and Franz J. Weissing. Optimal Floating and Queuing Strategies: The Logic of Territory Choice, 512

Perret, Florence. See Ronce, Ophélie, 485

Perrin, Nicolas, and Vladimir Mazalov. Local Competition, Inbreeding, and the Evolution of Sex-Biased Dispersal, 116

Persson, Lennart. See Claessen, David, 219

Petchey, Owen L. Species Diversity, Species Extinction, and Ecosystem Function, 696

Pfennig, David W. Effect of Predator-Prey Phylogenetic Similarity on the Fitness Consequences of Predation: A Trade-off between Nutrition and Disease?, 335

Pietiäinen, Hannu. See Brommer, Jon, 454

Possingham, Hugh P. See Richards, Shane A., 266

Ranta, Esa, Veijo Kaitala, Susanna Alaja, and David Tesar. Nonlinear Dynamics and the Evolution of Semelparous and Iteroparous Reproductive Strategies, 294

Raymond, Michel. See Lenormand, Thomas, 70

Reeve, Hudson K. A Transactional Theory of Within-Group Conflict, 365

Reich, Peter B. See Westoby, Mark, 649

Richards, Christopher M. Inbreeding Depression and Genetic Rescue in a Plant Metapopulation, 383

Richards, S. A. See Wilson, W. G., 83

Richards, Shane A., Roger M. Nisbet, William G. Wilson, and Hugh P. Possingham. Grazers and Diggers: Exploitation Competition and Coexistence among Foragers with Different Feeding Strategies on a Single Resource, 266

Roebuck, Jean-Philippe. See Menu, Frédéric, 724

Rogers, Duke S. See Sullivan, Jack, 755

Ronce, Ophélie, Florence Perret, and Isabelle Olivieri. Evolutionarily Stable Dispersal Rates Do Not Always Increase with Local Extinction Rates, 485

Roughgarden, Joan. See Hughes, Jennifer B., 618

Rozen, Daniel E., and Richard E. Lenski. Long-Term Experimental Evolution in *Escherichia coli*. VIII. Dynamics of a Balanced Polymorphism, 24

Schmitz, Oswald J., Peter A. Hambäck, and Andrew P. Beckerman. Trophic Cascades in Terrestrial Systems: A Review of the Effects of Carnivore Removals on Plants, 141

Schmitz, Oswald J. See Luttbeg, Barney, 669

Schreiber, Sebastian J., Laurel R. Fox, and Wayne M. Getz. Coevolution of Contrary Choices in Host-Parasitoid Systems, 637

Sheldon, B. C. See Merilä, J., 301

Smith, David. The Population Dynamics and Community Ecology of Root Hemiparasitic Plants, 13

Sullivan, Jack, Elizabeth Arellano, and Duke S. Rogers. Comparative Phylogeography of Mesoamerican Highland Rodents: Concerted versus Independent Response to Past Climatic Fluctuations, 755

Taper, Mark L. See Case, Ted J., 583

Tarpay, David R., and Robert E. Page, Jr. No Behavioral Control over Mating Frequency in Queen Honey Bees (*Apis mellifera* L.): Implications for the Evolution of Extreme Polyandry, 820

Taylor, Douglas R. See McCauley, David E., 814

Tesar, David. See Ranta, Esa, 294

Tiffin, Peter. Are Tolerance, Avoidance, and Antibiosis Evolutionarily and Ecologically Equivalent Responses of Plants to Herbivores? 128

Venable, D. L. See Clauss, M. J., 168

Viala, Muriel. See Menu, Frédéric, 724

Vogler, Alfred P. See Barracough, Timothy G., 419

Warton, David. See Westoby, Mark, 649

Weiblen, George D., Ryan K. Oyama, and Michael J. Donoghue. Phylogenetic Analysis of Dioecy in Monocotyledons, 46

Weissing, Franz J. See Pen, Ido, 512

Westoby, Mark, David Warton, and Peter B. Reich. The Time Value of Leaf Area, 649

Wilson, W. G., and S. A. Richards. Evolutionarily Stable Strategies for Consuming a Structured Resource, 83

Wilson, William G. See Richards, Shane A., 266

Zamora, Regino. See Gómez, José M., 657

Zhang, Da-Yong. Resource Allocation and the Evolution of Self-Fertilization in Plants, 187

Zink, Andrew G. The Evolution of Intraspecific Brood Parasitism in Birds and Insects, 395

Alphabetical Table of Contents of Titles

Analysis of Clines with Variable Selection and Variable Migration. Thomas Lenormand and Michel Raymond, 70.

Animal Guts as Ideal Chemical Reactors: Maximizing Absorption Rates. Peter A. Jumars, 527.

Animal Guts as Nonideal Chemical Reactors: Partial Mixing and Axial Variation in Absorption Kinetics. Peter A. Jumars, 544.

Are Tolerance, Avoidance, and Antibiosis Evolutionarily and Ecologically Equivalent Responses of Plants to Herbivores? Peter Tiffin, 128.

Bet-Hedging Diapause Strategies in Stochastic Environments. Frédéric Menu, Jean-Philippe Roebuck, and Muriel Viala, 724.

Coevolution of Contrary Choices in Host-Parasitoid Systems. Sebastian J. Schreiber, Laurel R. Fox, and Wayne M. Getz, 637.

Comparative Phylogeography of Mesoamerican Highland Rodents: Concerted versus Independent Response to Past Climatic Fluctuations. Jack Sullivan, Elizabeth Arellano, and Duke S. Rogers, 755.

Competition and the Effect of Spatial Resource Heterogeneity on Evolutionary Diversification. Troy Day, 790.

Daily Patterns of Optimal Producer and Scrounger Use under Predation Hazard: A State-Dependent Dynamic Game Analysis. Zoltán Barta and Luc-Alain Giraldeau, 570.

Detecting the Geographical Pattern of Speciation from Species-Level Phylogenies. Timothy G. Barraclough and Alfried P. Vogler, 419.

Dispersal, Environmental Correlation, and Spatial Synchrony in Population Dynamics. Bruce E. Kendall, Ottar N. Bjørnstad, Jordi Bascompte, Timothy H. Keitt, and William F. Fagan, 628.

The Distribution of Abundance in Neutral Communities. Graham Bell, 606.

Disturbance Frequency and Community Stability in Native Tallgrass Prairie. Scott L. Collins, 311.

Dwarfs and Giants: Cannibalism and Competition in Size-Structured Populations. David Claessen, André M. de Roos, and Lennart Persson, 219.

Ectotherms, Temperature, and Trade-offs: Size and Number of Eggs in a Carabid Beetle. Ger Ernsting and Anneke Isaaks, 804.

Effect of Herbivory and Plant Species Replacement on Primary Production. Claire de Mazancourt and Michel Loreau, 735.

Effect of Predator-Prey Phylogenetic Similarity on the Fitness Consequences of Predation: A Trade-off between Nutrition and Disease? David W. Pfennig, 335.

The Effects of a Bottleneck on Inbreeding Depression and the Genetic Load. Mark Kirkpatrick and Philippe Jarne, 154.

Effects of Enrichment on Three-Level Food Chains with Omnivory. Sebastian Diehl and Margit Feißen, 200.

Energy, Density, and Constraints to Species Richness: Ant Assemblages along a Productivity Gradient. Michael Kaspari, Sean O'Donnell, and James R. Kercher, 280.

The Evolution of Intraspecific Brood Parasitism in Birds and Insects. Andrew G. Zink, 395.

Evolutionarily Stable Dispersal Rates Do Not Always Increase with Local Extinction Rates. Ophélie Ronce, Florence Perret, and Isabelle Olivieri, 485.

Evolutionarily Stable Strategies for Consuming a Structured Resource. W. G. Wilson and S. A. Richards, 83.

Fluctuating Asymmetry as a Bioindicator of Stress: Comparing Efficacy of Analyses Involving Multiple Traits. Brian Leung, Mark R. Forbes, and David Houle, 101.

Fluctuating Environments and Phytoplankton Community Structure: A Stochastic Model. John M. Anderson and Beatrix E. Beisner, 556.

Forest Canopy Stratification—Is It Useful? Geoffrey G. Parker and Martin J. Brown, 473.

A General and Dynamic Species Abundance Model, Embracing the Lognormal and the Gamma Models. Ola H. Diserud and Steinar Engen, 497.

Grazers and Diggers: Exploitation Competition and Coexistence among Foragers with Different Feeding Strategies on a Single Resource. Shane A. Richards, Roger M. Nisbet, William G. Wilson, and Hugh P. Possingham, 266.

Inbreeding Depression and Genetic Rescue in a Plant Metapopulation. Christopher M. Richards, 383.

The Interaction between Competition and Predation: A Meta-analysis of Field Experiments. Jessica Gurevitch, Janet A. Morrison, and Larry V. Hedges, 435.

Interspecific Competition, Environmental Gradients, Gene Flow, and the Coevolution of Species' Borders. Ted J. Case and Mark L. Taper, 583.

Lifetime Reproductive Success and Heritability in Nature. J. Merila and B. C. Sheldon, 301.

Local Competition, Inbreeding, and the Evolution of Sex-Biased Dispersal. Nicolas Perrin and Vladimir Mazalov, 116.

The Logic and Realism of the Hypothesis of Exploitation Ecosystems. Lauri Oksanen and Tarja Oksanen, 703.

Long-Term Experimental Evolution in *Escherichia coli*. VIII. Dynamics of a Balanced Polymorphism. Daniel E. Rozen and Richard E. Lenski, 24.

No Behavioral Control over Mating Frequency in Queen Honey Bees (*Apis mellifera* L.): Implications for the Evolution of Extreme Polyandry. David R. Tarpy and Robert E. Page, Jr., 820.

Nonlinear Dynamics and the Evolution of Semelparous and Iteroparous Reproductive Strategies. Esa Ranta, Veijo Kaitala, Susanna Alaja, and David Tesar, 294.

Optimal Floating and Queuing Strategies: The Logic of Territory Choice. Ido Pen and Franz J. Weissing, 512.

Parental Care: The Key to Understanding Endothermy and Other Convergent Features in Birds and Mammals. C. G. Farmer, 326.

Patterns of Annual Seed Production by Northern Hemisphere Trees: A Global Perspective. Walter D. Koenig and Johannes M. H. Knops, 59.

Phylogenetic Analysis of Dioecy in Monocotyledons. George D. Weiblen, Ryan K. Oyama, and Michael J. Donoghue, 46.

Population Dynamic and Genetic

Consequences of Spatial Density-Dependent Dispersal in Patchy Populations. Jon Aars and Rolf A. Ims, 252.

The Population Dynamics and Community Ecology of Root Hemiparasitic Plants. David Smith, 13.

Population Structure Influences Sex Ratio Evolution in a Gynodioecious Plant. David E. McCauley, Matthew S. Olson, Stacie N. Emery, and Douglas R. Taylor, 814.

Power Struggles, Dominance Testing, and Reproductive Skew. Michael A. Cant and Rufus A. Johnstone, 406.

Predator and Prey Models with Flexible Individual Behavior and Imperfect Information. Barney Luttbeg and Oswald J. Schmitz, 669.

Recruiters and Joiners: Using Optimal Skew Theory to Predict Group Size and the Division of Resources within Groups of Social Foragers. Ian M. Hamilton, 684.

A Reevaluation of Density-Dependent Population Cycles in Open Systems. Mark Johnson, 36.

Reproductive Effort and Reproductive Values in Periodic Environments. Jon Brommer, Hanna Kokko, and Hannu Pietiäinen, 454.

Resource Allocation and the Evolution of Self-Fertilization in Plants. Da-Yong Zhang, 187.

Seed Germination in Desert Annuals: An Empirical Test of Adaptive Bet Hedging. M. J. Clauss and D. L. Venable, 168.

Spatial Variation in the Selective Scenarios of *Hormathophylla spinosa* (Cruciferae). José M. Gómez and Regino Zamora, 657.

Species Diversity and Biomass Stability. Jennifer B. Hughes and Joan Roughgarden, 618.

Species Diversity, Species Extinction, and Ecosystem Function. Owen L. Petchey, 696.

Temperature or Transport? Range Limits in Marine Species Mediated Solely by Flow. Brian Gaylord and Steven D. Gaines, 769.

The Time Value of Leaf Area. Mark Westoby, David Warton, and Peter B. Reich, 649.

A Transactional Theory of Within-Group Conflict. Hudson K. Reeve, 365.

Trophic Cascades in Terrestrial Systems: A Review of the Effects of Carnivore Removals on Plants. Oswald J. Schmitz, Peter A. Hambäck, and Andrew P. Beckerman, 141.

Trophic Interactions during Primary Succession: Herbivores Slow a Plant Reinvasion at Mount St. Helens. William F. Fagan and John G. Bishop, 238.

Using the Past to Predict the Present: Confidence Intervals for Regression Equations in Phylogenetic Comparative Methods. Theodore Garland, Jr., and Anthony R. Ives, 346.

What Does It Mean to Be a Naturalist at the End of the Twentieth Century? Peter R. Grant, 1.

Alphabetical Table of Keywords

absorption, 544

abundance, 606

additive genetic variance, 301

aggression, 365, 406

allometry, 346

ancestor reconstruction, 346

asymmetrical gene flow, 70

barnacles, 36

Bayesian updating, 669

bet hedging, 168, 724

biodiversity, 606, 696

biogeography, 419, 769

biomass, 606

biomass variance, 618

birds, 395

Blepharisma, 200

boreal forests, 735

bottlenecks, 154

breeding systems, 46

cannibalism, 335

canopy, 473

Carabidae, 804

character displacement, 583, 790

chestnut weevil, 724

climate, 280

cline, 70

coevolution, 583, 637

coexistence, 200, 266

coin-flipping plasticity, 724

colonization, 238

community dynamics, 311

community stability, 311

community structure, 618

comparative method, 346

comparative phylogeography, 755

compensatory feeding, 527

competition, 219, 435, 556, 790

competitive coexistence, 83

composite fluctuating asymmetry, 101

conditional dispersal, 252

cooperation, 365

cooperative breeding, 406

coupled patch model, 628

cycles, 36

cytoplasmic male sterility, 814

day length, 804

degree of parasitism, 13

deleterious mutations, 154

demographic variance, 497

demography, 252

density dependence, 36

density-dependent selection, 790

desert annual plant, 168

diet choice, 335

diffusion approximation, 497

digestion, 527, 544

dioecy, 46

direct effects, 141

disease transmission, 335

dispersal, 485, 628, 769

disturbance, 311

diversity, 280, 419, 556, 618

dominance, 365, 684

dominance interactions, 406

"double" growth curves, 219

dynamic species abundance models, 497

ecological experiments, 435

ecological strategies, 649

ecology, 1

efficiency, 280

egg size, 804

endothermy, 326

environmental correlation, 628

environmental variance, 497

Escherichia coli, 24

eusociality, 365

evolution, 1, 128

evolutionarily stable strategies, 395, 454, 485, 512, 637

evolutionary ecology, 657

evolutionary stable strategies, 83

experimental evolution, 24

exploitation competition, 83, 266

extinctions, 1

fecundity, 804

Ficedula albicollis, 301

fire, 311

fitness, 301

fitness cost, 70

floating, 512

food web, 141

foraging, 83, 266

foraging efficiency, 684

forest, 473

fragmented habitats, 252

frequency-dependent selection, 24, 790, 814

future, 1

gene flow, 252, 383, 583

genetic load, 154

geographic range limits, 583

grazing optimization, 735

gynodioecy, 814

herbivory, 128, 141, 238, 435, 703

heritability, 301

honey bee, 820

host-parasitoid interactions, 637

hydrolysis, 544

inbreeding depression, 154, 187, 383

indirect effects, 141

individual behavior, 669

insecticide resistance, 70

insects, 395

intergenerational trade-off, 454

intraspecific brood parasitism, 395

invisibility, 200

invasion, 238

invasion analysis, 266

inverse density dependence, 637

iteroparity, 294

kin selection, 116, 365

layer, 473

leaf longevity, 649

life history, 168, 187, 294, 454

lifetime reproductive success, 301

local extinction, 485

local mate competition, 116

local resource competition, 116

Lotka-Volterra, 790

lupine, 238

mammals, 703

mast fruiting, 59

masting, 59

mating frequency, 820

mating systems, 116

maximum likelihood, 46, 755

meta-analysis, 141, 435

metabolic rate, 346

metapopulations, 383, 485

microsatellites, 820

Middle American highlands, 755

model, 128

models, 1

modes, 419

monocotyledons, 46

Moran effect, 628

Mount St. Helens, 238

multiple stable states, 200

multispecific systems, 657

net primary production, 280

neutral model, 606

nonadditive genetic variance, 301

nonlinear dynamics, 294

null models, 419

nutrient cycling, 735

nutrient inputs and outputs, 735

oceanography, 769

open systems, 36

operational sex ratio, 252

optimal foraging, 527

optimal resource allocation, 187

optimal skew theory, 684

pairwise interactions, 13

parametric bootstrap, 755

parasites, 335

parental care, 326

parsimony, 46

Perca fluviatilis, 219

perception, 669

Peromyscus, 755

persistence, 294

phenotypic plasticity, 168

phylogeny, 46, 335, 346

physical-biological coupling, 769

phytoplankton, 556

plant population dynamics, 13

plant-animal interactions, 657

polyandry, 820

population dynamics, 485

population structure, 383, 814

potential reproductive rate, 116

power, 101

predation, 435, 703

predation risk, 669, 684

predator-prey interactions, 669

primary production, 735

primary productivity, 703

primary succession, 238

producer-scrounger game, 570

prolonged diapause, 724

protozoa, 200

queueing, 512

RAPD-PCR, 820

Rapoport's rule, 583

reactor theory, 527, 544

recruitment, 769

regression, 346

Reithrodontomys sumichrasti, 755

relatedness, 395

reproductive behavior, 820

reproductive effort, 454

reproductive skew, 365, 406

reproductive value, 454

resistance, 128

resource exploitation, 790

resource structure, 83

resource tracking, 59

resource use complementarity, 696

resource-based competition, 13

risk spreading, 724

root parasitism, 13

sampling effect, 696

seasonality, 512

seed germination, 168

seed production, 59

selection, 70

self-fertilization, 154, 187

semelparity, 294

size-dependent cannibalism, 219

small habitat selection, 512

social foraging, 570, 684

sociality, 406

spatial density dependence, 252

spatial models, 637

spatial patterns, 59

spatial structure, 83

spatial synchrony, 628

spatial variation in selection, 657

speciation, 419

species borders, 583

species diversity, 606

species interactions, 618

species richness, 696

species-area relationship, 606

specific leaf area, 649

stability, 618

stable polymorphism, 24

state-dependent dynamic game, 570

statistical interaction, 435

stochastic model, 556, 724

stratification, 473

stratum, 473

stress, 101

structural equation modeling, 657

structured-population model, 219

sympmorphosis, 527

syntheses, 1

tallgrass prairie, 311

taxon, 280

temperature, 804

temporal heterogeneity, 556

temporal variability, 311

territory acquisition, 512

Tetrahymena, 200

thermogenesis, 326

θ -logistic density regulation, 497

time discounting, 649

tolerance, 128

trade-offs, 335, 649, 804

trophic cascades, 141, 703

turnover rates, 735

ungulate herbivory, 657

Ural owl, 454

variable environments, 168

variable gene flow, 70

variation, 696

vegetation, 703

